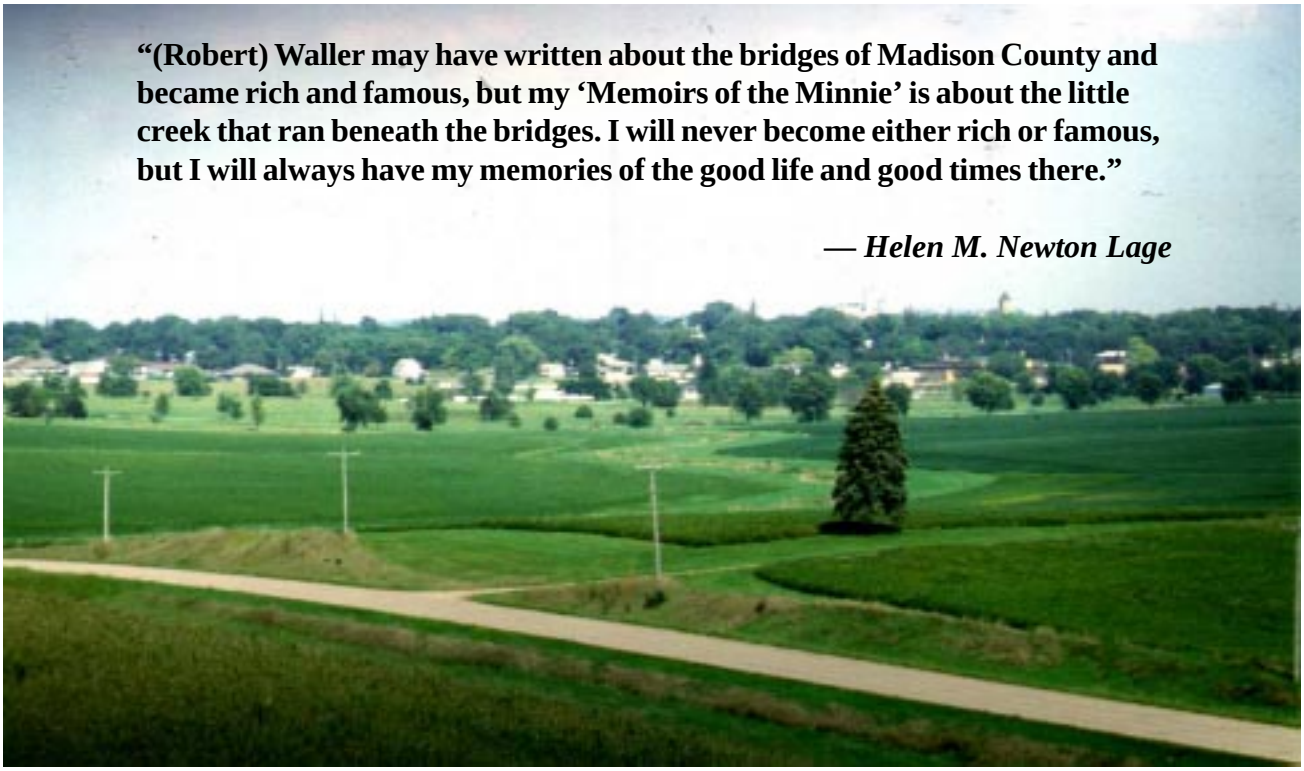
The Minnehaha Creek Watershed Project



Minnehaha Creek flows through fertile Grundy County farmland before reaching Grundy Center.

The magic of Minnehaha Creek is contained in the voices, the words and the memories of the people who grew up along its banks. The Minnehaha has been a glorious — if unsung — teacher to generations of Grundy County youngsters. The lessons were simple, hands-on and lifelong from the days of their youth. The simple presence of a creek offered everything from building dams and catching frogs to watering livestock during chores.

The Minnehaha still offers those simple lessons. But to many, life is no longer as simple. The lessons are more complex.

Minnehaha Creek is ready again to provide some of those lessons. As a result, it is hoped the stream itself will benefit as much as its pupils.

The Minnehaha Creek Watershed Project is a concentrated effort to improve the stream. It is a joint venture of both urban and rural residents to protect the watershed, leaving something behind that's even better.

And once again, one of life's great lessons comes through their contact with Minnehaha Creek. They are learning that the water used is a direct reflection of themselves. Through their example, they can teach the importance of protecting natural resources to the next generations. They are learning that individual actions, can make things better.

Minnehaha Creek is like an old friend that we have, from time to time over the years, neglected. Yet given an opportunity to reflect, those who have grown up along the stream have strong emotions for the Minnehaha. Life's experiences on the creek for some have become fond . . .

Minnie Memories

"Minnie Creek, back in the 30s and early 40s, was an adventure into the wilderness for young boys. The creek was a place to explore and see all kinds of birds and animals. It was just fun to go because you felt like you were in a world of your own away from everyone else. The trees were our forest and the creek was a wide river to us. This was also a time before chemicals and pesticides. In those days, you could drink the water from the little springs and the field tile."

Leonard Ralston

"Growing up in the southern part of Grundy Center made going to the Minnehaha Creek a favorite pastime. The creek ran through the property of Pete Wolthoff. There was a big slough that was great for hunting. My two older brothers, Bob and Russell and myself, helped put many a meal on the family table with game from this slough. Roast pheasant stuffed with sage dressing was served quite often and it made a person feel good that I had contributed to food on the table. Rabbit was another meal. In the summertime, we would dam up the creek so it was deep enough to swim in. We had to use sod from the banks to strengthen and hold the water in. I remember one time Pete yelled at us about tearing the sod. I don't know as I ever heard the word 'conservation' during my early years."

Amos Albright

Minnehaha Creek as it appeared more than 70 years ago (left) and how it appears today just south of the Grundy County Fairgrounds.

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The Minnehaha Project

Project coordintar Judie Krebsbach takes monthly water samples at several places along Minnehaha Creek.

Advisory Board: Jim Copeman, Richard Briggs, Vera Krull, Robert Crouse, Jerry Waugh, Dale Grimmius, Dick Lynch and Kevin Williams.
Grundy County SWCD Commissioners: Kimberly Junker, Harvin Meyer, Don Davidson, Ronald Engle, DeeGene McMartin and assistants Verne Eberline and Lois Stork.
Contact Persons: Marcia Roll, District Conservationist and Judith Krebsbach, Project Coordinator at (319) 824-3634.

The major focus of the Minnehaha Creek Watershed Project is on information and education. Through the efforts of the project, both urban and rural residents will gain an awareness of how everyday activities have an impact on water quality.

The project is a result of the Grundy County Soil and Water Conservation District commissioners wanting to address soil and water conservation on a watershed level. This puts a broader scope on conservation and emphasizes the concept that all aspects of nature are interdependent.

Minnehaha Creek drains approximately 7,000 acres. Cropland accounts for 6,000 acres while another 880 acres are in the city of Grundy Center.

The project offers a unique opportunity for urban and rural residents to learn more about each other since success is dependent on the cooperation from both populations. The primary source of stream contamination in Iowa is sediment, nutrient and chemical runoff from agricultural land and urbran areas.

Mission statement:

"The Minnehaha Creek Watershed Project is a unique cooperative effort of urban and rural land interests. Together they seek to demonstrate innovative and transferable practices to educate the current population while enhancing the watershed for future generations."

A total of $273,460 has been appropriated to the Grundy County Soil and Water Conservation District for the project including $156,335 from Section 319 of the federal Clean Water Act and administered by the Iowa Department of Natural Resources. An additional $117,125 will come from the Water Protection Fund administered by the Iowa Department of Agriculture and Land Stewardship.

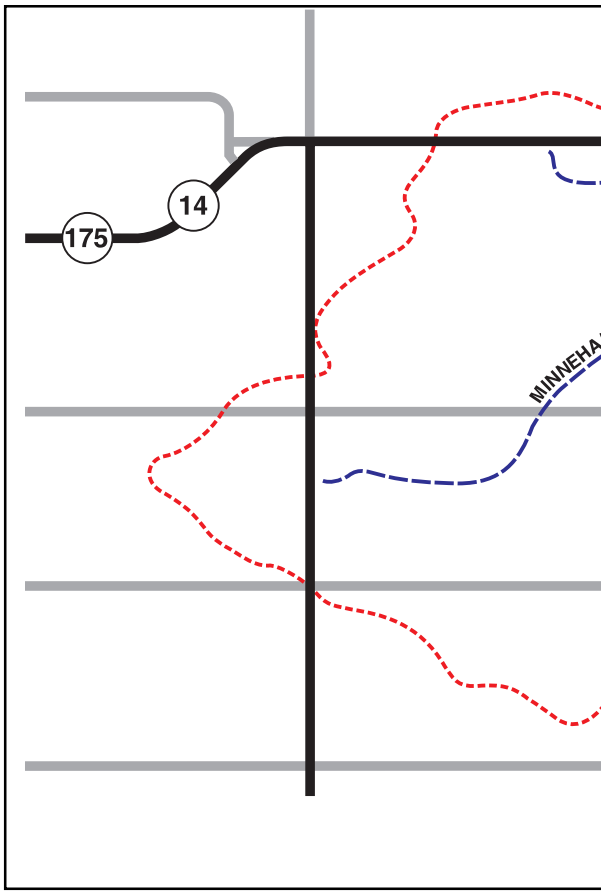
But ultimately, the success of the project rests in the hands of local people. It is through their efforts that improvements to Minnehaha Creek and its watershed can be achieved.

Minnehaha Creek: Urban ar

Since nonpoint source pollution can be attributed to various land disturbances, specific methods have been developed to minimize both these disturbances and the runoff they generate. These methods are known as best management practices or BMPs.

Synonomous with pollution prevention, BMPs use the land in the wisest possible ways — whether it be for growing crops or grazing cattle, building streets or maintaining lawns. BMPs are exactly what the phrase implies --- coordinated, judicious timing of activities and use of vegetation and materials (including some structures) as components within a total land management system.

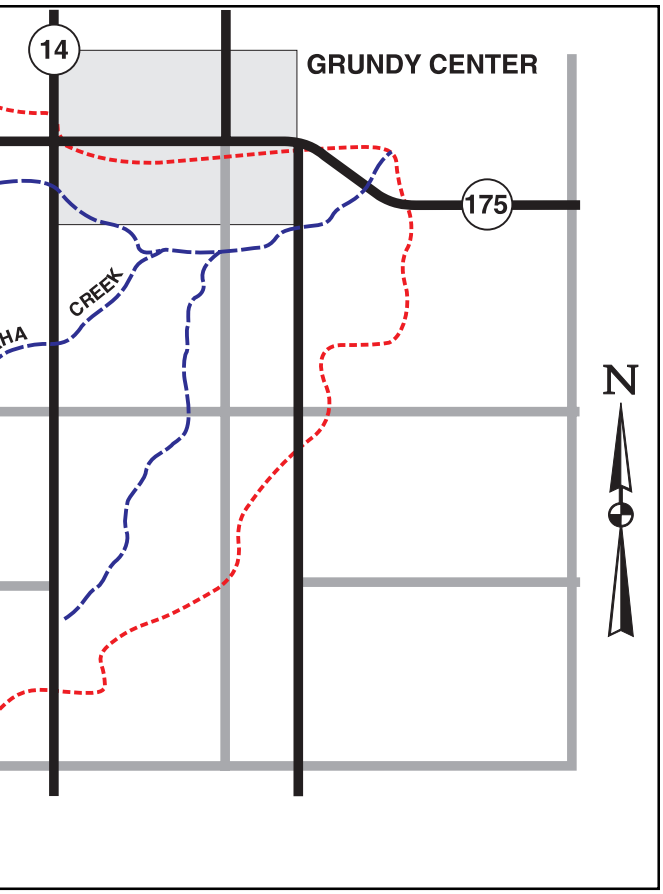
The accompanying map shows the area of the Minnehaha Creek watershed and some of the BMPs that will be used to improve water quality in the stream.



Educating the public about city storm sewers is a major component of the project. Dumping yard waste and other contaminants such as used motor oil or paint into storm sewers can pollute streams like Minnehaha Creek. Not only does proper management of storm sewers make good sense environmentally, but also fiscally. Grass clippings and other yard waste from lawns dumped in the street require city workers to unclog the system after rain, costing taxpapers' money.

Grundy Center Community High School students plant native prairie as a buffer along a tributary of Minnehaha Creek.

nd rural working together



Farmers, like Dale Grimmius, have assistance from Grundy County District Conservationist Marcia Roll to develop whole farm resource management plans. One practice being emphasized is developing nutrient and pest management programs for cropland. By proper soil testing, nutrient application is evaluated so correct amounts are applied only when needed.

Practices such as no-till farming used by local producers like Paul Harberts can produce dramatic improvements for water quality. Harberts said no-till not only reduces soil erosion, but also saves him time and money through reduced machinery and fuel costs without sacrificing yields.

Streambanks can effectively be stabilized to prevent erosion in both rural and urban settings.

Grundy County Engineer Gary Mauer looks over a road ditch southwest of Grundy Center where a roadside management program will soon be implemented. The program will incorporate a variety of practices that not only control weeds, but enhance the value of the roadside aesthetically, increase wildlife habitat and improve water quality by decreasing soil erosion.

Town & Country effort underway

Vera Krull, a member of the Town & Country Golf Club with a native prairie planting near the second tee. The golf course has been using prairie plantings in various locations to control run-off.

Over the years, Minnehaha Creek has been catching a lot more than the errant shots of golfers at the Town & Country Golf Club. It's also been taking a lot of sediment from streambank erosion.

The members of the golf course have been among the first in the community to embrace the watershed project and some of their efforts can already be seen.

The golf course is an excellent example of how a natural approach can provide both beauty and function to a recreational area. Improvements such as the strategic planting of prairie flowers not only act as a filter for run-off into the stream, but also enhance the aesthetics of the course.

During the Minnehaha Creek Watershed Project, members of the golf club continue to be involved in stabilization of the streambank and other efforts to improve the watershed. Members of the club have also offered the use of labor and equipment for improvement projects.

But perhaps most importantly, Town & Country allows access to the golf course for educational tours. By its very nature and name, Town & Country provides a superb venue to showcase a joint effort of urban and rural residents to improve their watershed.

Native plants provide a colorful buffer around the pond.

Understanding storm sewers

To many people, storm sewers would appear to be the perfect outside drain. Often times, the storm sewers become recepticles for yard waste and other potential contaminants such as used motor oil.

"A lot of people simply have no concept that what they put down the storm sewers affects the water quality of streams," said Jim Copeman, public works director for Grundy Center.

One of the primary objectives of the Minnehaha Creek Watershed Project is to educate the residents of Grundy Center about how their actions can affect water quality.

Copeman said the message has already been driven home to some residents who witnessed a demonstration in the spring of 1998. By simply opening a fire hydrant, letting the water run through the storm sewer system and watching the outlet into Minnehaha Creek, people were able to see how much debris is carried into the stream from the urban area.

"The water ran clear at the outlet at the start, but pretty soon there was all kinds of dirt and leaves coming through. People could not believe the impact of the run-off from the storm sewers," Copeman said.

For many homeowners, the practice of blowing grass clippings and leaves into the street seems like a common sense approach to disposal. The next rain, afterall, will simply wash it all away down the storm sewers.

Public Works Director Jim Copeman removing yard waste debris from a storm sewer inlet

But Copeman said allowing the yard waste into storm sewers poses both environmental and economic problems.

"The decomposition of grass clippings and leaves take oxygen out of the water," Copeman said.

Too much debris also clogs the storm sewer system causing water to back up. It is the taxpayers of Grundy Center who eventually pay the price for clean ups, after virtually every rain.

"We can often times have two people cleaning the intakes on the street all day after a rain. At a cost of about $70 an hour for the manpower and equipment, that's over $500 a day to clean up after a rain," Copeman said.

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Grundy County's soil:

Preserving the very best

It's no secret that the soil in Grundy County is particularly valuable to agriculture. Statistics show that farm land in the county consistently commands the highest per acre rental rates in Iowa and has traditionally ranked among the top five counties in the state for land values. Many of the top seed companies use the rich soil here for their seed production, including land within the Minnehaha Creek watershed, where 23 percent of the total area is considered to be highly erodible.

Soil erosion from cropland is the number one source of surface water contamination in the state of Iowa. Erosion not only fills our streams and lakes with sediment, but can also carry other contaminants such as fertilizers and pesticides which degrade water quality. Without the use of best management practices (known as BMPs), the long-term potential is to have both poor water quality and lower cropland productivity.

And from the producer's standpoint, it just makes good sense.

"The Minnehaha Project offers an opportunity for the agricultural community to educate the urban sector that we are concerned about water quality and soil erosion. There is no advantage economically to over apply nutrients," according to Dale Grimmius, a local producer.

Some of the latest technological equipment available to farmers such as global positioning will be demonstrated during the project.

"I have always been interested in soil conservation. The Minnehaha Project interests me for two reasons. First, it involves the community, urban as well as agricultural community. Second, it gives me a chance to show my urban neighbors that farmers are interested in water quality and soil conservation. We are trying to protect the environment."

Dick Lynch

During the Minnehaha Creek Watershed Project, the demonstration of agricultural BMPs will be an important component of the effort. Some of the agricultural practices that will be demonstrated are conservation tillage, riparian buffers, grass waterways, grazing management, cover crops and nutrient and pest management and shallow water wetlands.

"It will be interesting to see how different practices affect water quality," said David Strickler, a local producer.

"One practice of particular interest is the establishment of grass filter strips along the creek and noticing changes that occur," Strickler said.

The Minnehaha Creek Watershed Project provides a chance for farmers to not only learn more about how agriculture impacts water quality, but also offers an opportunity to secure funding to help in the implementation of conservation practices.

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